SMATV headend QPSK-PAL with CI
SIG9708CI

DIGIFLEX

SMATV semi-modular headend for the reception and distribution of 8 digital satellite channels. It demodulates 8 digital channels and remodulates them into the RF band (47-862MHz). The headend includes 8 QPSK receivers with CI slot, 8 A/V vestigial modulators, 8-way combiner with existing TV signal mixing and power supply unit. Two A/V input/output connectors are available to connect external devices to two receivers, to modulate signals from two external sources (DVD player, camera, etc)

Characteristics:

- Easy to install, included in each box is one power supply, 8 QPSK receivers with common interface slot, 8 A/V vestigial side full band modulators(47-862MHz) with audio stereo, combiner to mix 8 RF channels, final amplifier 100dBµV per channel.
- Very high output level: 100dµV per channel with separate regulation for each receiver.
- Wide input level range to guarantee good reception of programs even when the signals are weak.
- Master/slave setting available to share one smart card among several receivers, to decrypt several programs with only one subscription (if allowed by the pay-tv service provider).
- Semi-modular philosophy enables you to add or remove single receiver modules.
- DiSEqC 1.0, 4 positions 14/18V, 0/22KHz suitable to feed an LNB or to control multiswitch output.
- Weighted C/N >57dB.
- WSS signalling to automatically set the proper video format at the TV.
- A/V output/input to connect two receivers to external modulators or to modulate signal from two external sources (DVD players, cameras, etc…)
- Wall mount or 19” cabinet installation.
- Removable front panel, with key lock to avoid common interface modules or cards being stolen.
- Programmable via PC.
- Firmware upgradable via PC on location.
- Natural convection cooling, no fans inside reducing maintenance costs.

Fracarro Code	Item	Packaging
283141	SIG9708CI	Digital headend with 8 QPSK receivers with CI
283142	SIG9708CA	Cabinet for SIG9708CI headend, with power supply included but QPSK receivers
283143	SIG9708MR	QPSK CI receiver individually packed, ready to be installed into SIG9708CA
283144	SIG9708PS	Power supply for SIG9708CI individually packed

		SIG9708CI
Fracarro Code		283141
Front-End Satellite		
Input frequency	MHz	950-2150
Bandwidth	MHz	36
Input level	dBµV	43-84
Input step tuning	MHz	1
DiSEqC		0/14/18VDC 0/22KHz DiSEqC 1.0
Demodulation		QPSK compliant ETS 300421
FEC		AUTO
Symbol rate	Ms/sec	1-45 (compatible SCPC/MCPC)
Modulation		
Modulator		VSB
Standard		PAL B,G Stereo
Output frequency	MHz	47-862
Output channels		E2-E69
Max. output level per channel	dBµV	100
Output level adjustment	dB	0-10
TV mixing input	MHz	47-862
TV mixing insertion loss	dB	4
Video Decoder		
Video decoder		MPEG-2, Main Level @ Main Profile
Video format		4:3, 16:9, pan scan, letter box, adapted
Audio Decoder		
Audio Decoder		MPEG-2 Layer I and Layer II
Audio format		Stereo, dual sound
General Features		
Mains voltage	V, Hz	220–240, 50-60
Power consumption	W	130
Connectors	type	F female
A/V connectors		SUB-D 9 pin
Dimensions (l × h × d)	mm	430×305x200
Operating temperature	°C	-10 to +45
Compliant		EN50083-2, EN60065, EN50221, ETSI TS101699
Programming unit		TPE (not included)

Fracarro Code	Item	Packaging	Quantity	Dimensions	Weight	Total weight
			pcs	mm	Kg	Kg
283141	SIG9708CI	Single	1	430×305x200	12.000	13.000
283142	SIG9708CA	Single	1	430×305x200	11.000	11.000
283143	SIG9708MR	Single	1	300×200x100	0.722	0.722
283144	SIG9708PS	Single	1	300×200x100	1.600	1.675

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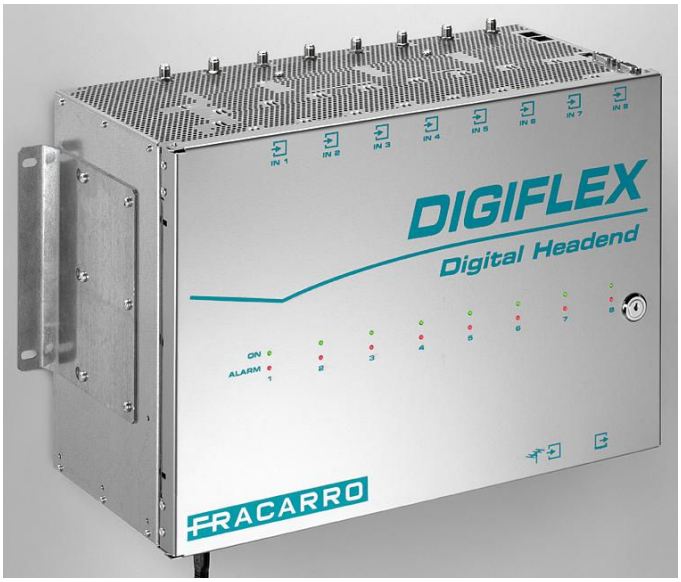
SMATV headend COFDM – PAL with Common Interface

SIG9808CI

DIGIFLEX



SMATV semi-modular headend for the reception and distribution of 8 digital satellite channels. It demodulates 8 digital channels and remodulates them into the RF band (47-862MHz). The headend includes 8 OFDM receivers with CI slot, 8 A/V vestigial modulators, 8-way combiner with existing TV signal mixing and power supply unit. Two A/V input/output connectors are available to connect external devices to two receivers, to modulate signals from two external sources (DVD players, cameras, etc)
External input loop-through available using the active tap SIG9808LT.

Main Specifications:

- Easy to install, included in each box is one power supply, 8 OFDM receivers with common interface slot, 8 A/V vestigial side full-band modulators (47-862MHz) with audio stereo, combiner to mix 8 RF channels, final amplifier 100dBµV per channel.
- Very high output level: 98dµV per channel with separate regulation for each receiver.
- Wide dynamic input range to guarantee good reception of programs even when signals are weak.
- Master/slave setting available to share one smart card among several receivers, to decrypt several programs with only one subscription (if allowed by the pay TV service provider).
- Highly flexible - up to 8 modules, either COFDM or QPSK, can be added together.
- Remote power supply from each receiver to feed pre-amplifier (max 400mA @ 14V).
- WSS signalling to automatically set the proper video format on the TV.
- Weighted C/N >56dB.
- A/V output/input to connect two receivers to external modulators or to modulate signals from two external sources (DVD player, camera, etc…)
- Wall mount or 19” cabinet installation.
- Removable front panel, with lock to avoid common interface modules or cards being stolen.
- Programmable via PC.
- Firmware upgradable via PC on location.
- Natural convection cooling, no fans inside, reducing maintenance costs.

Fracarro Code	Item	Packaging
283145	SIG9808CI	Digital headend with 8 OFDM receivers with CI
283146	SIG9808MR	OFDM receivers in individual packaging, ready to be installed in SIG9708CA
283147	SIG9808LT	External active loop-thorugh for SIG9808CI, gain 0dB
283142	SIG9708CA	Cabinet for Digiflex headend with power supply included but without OFDM receivers
283144	SIG9708PS	Power supply for Digiflex in individual packaging

		SIG9808CI
Fracarro code		283145
Front-End COFDM		
Input frequency	MHz	174-230, 470-862
Input level	dBµV	35-80
Input step tuning	KHz	166.7
Demodulation		ETS 300744
FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO
Carriers		2K, 8K
Modulation		QPSK, 16-QAM, 64-QAM
Guard interval		1/4, 1/8, 1/16, 1/32
AFC Range	KHz	± 285 (2K), ± 142 (8K)
Modulation		
Modulator		Vestigial side band
Standard		PAL B,G Stereo
Output frequency	MHz	47-862
Output channels		E2-E69
Max. output level per channel	dBµV	100
Output level adjustment	dB	0-15
Weighted C/N	dB	> 56
TV mixing input	MHz	47-862
TV mixing insertion loss	dB	2
Video Decoder		
Video decoder		MPEG-2, main level @ main profile
Video format		Pan scan, letterbox, combined, 16:9
Audio Decoder		
Audio decoder		MPEG-2 layer I and layer II
Audio format		Stereo, Dual sound
GeneralFfeatures		
Mains voltage ~	V, Hz	220-240, 50-60
Power consumption	W	110
Remote power supply	mA	400 @ 14V
Connectors	tipo	F female
A/V connectors		SUB-D 9 pin
Dimensions (L × H × W)	mm	430×305x200
Operating temperature	°C	-10 to +45
Compliant		EN50083-2, EN60065, EN50221, ETSI TS101699
Programming unit		TPE
		SIG9808LT
Fracarro code		283147
Input frequency	MHz	47-862
Tap loss	dB	0
Max output level (IM3 -54dB)	dBµV	96
Absorption	mA	60 @ 12V

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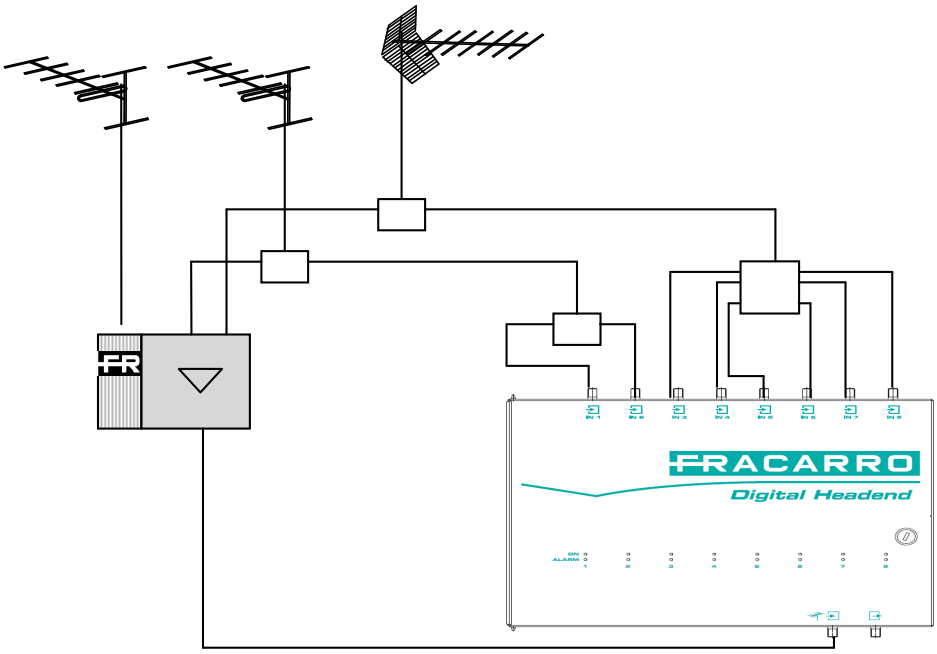
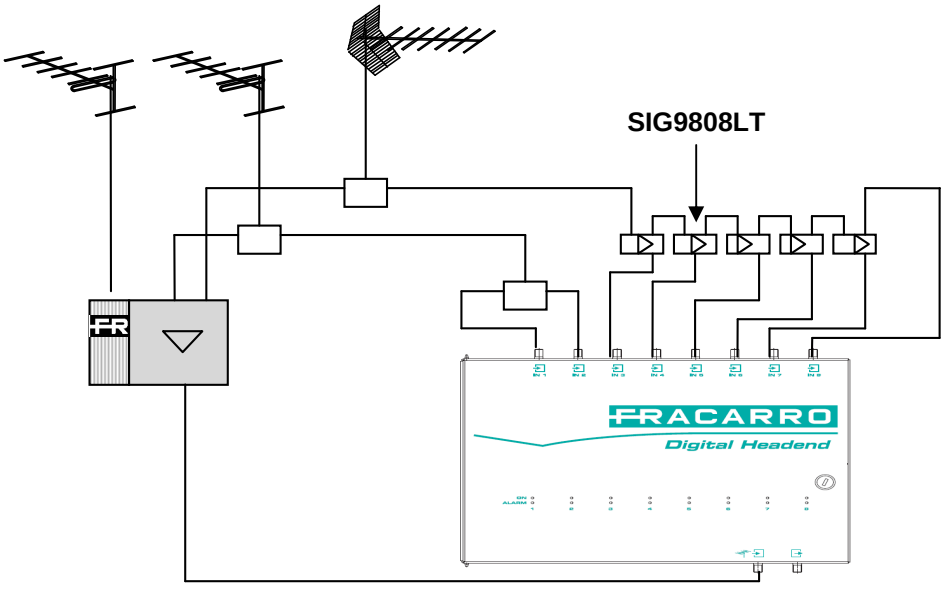
Installation examples



When the input signal is strong it is possible to split it several times without causing a problem to the receiver



When the input signal is weak it is possible to perform an RF loop-thorough with the amplified tap SIG9808LT (0dB loss) fed from each receiver.

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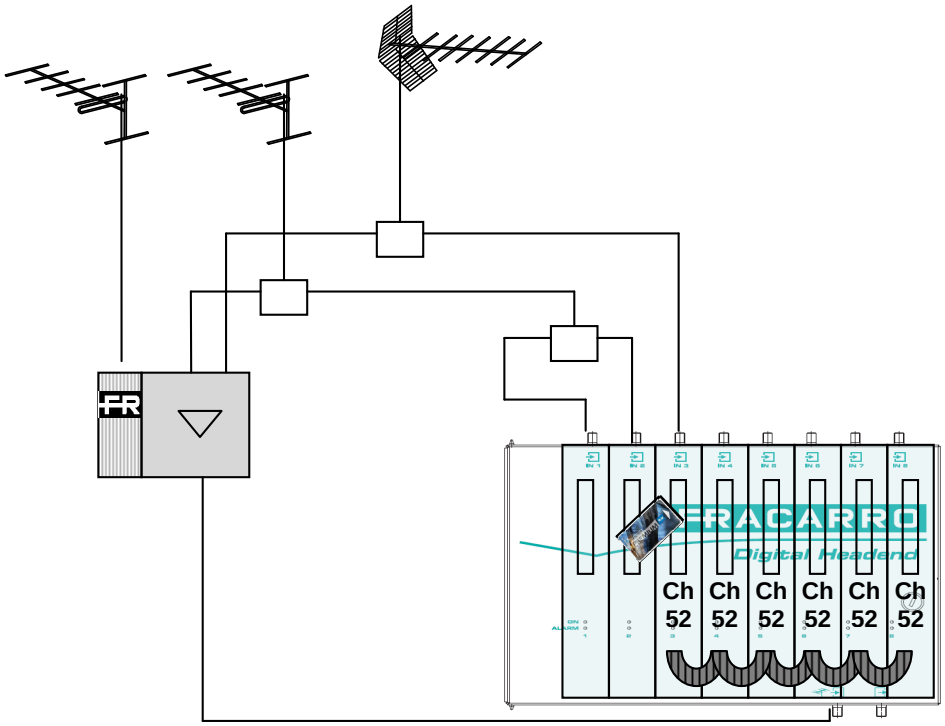
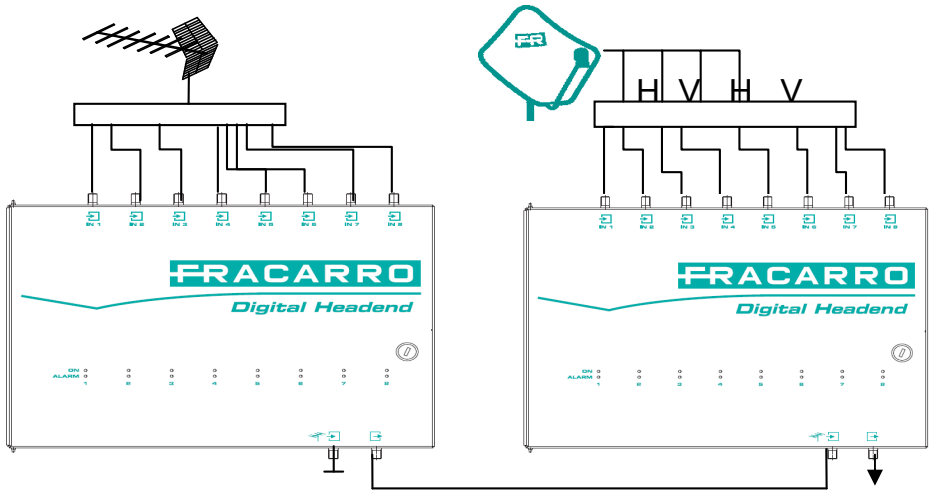


It is possible to carry on the decoded mux (even the unscrumble key when allowed by the brodcaster) to other modules using a flat cable.



It is possibile to install an SIG9708CI and SIG9808CI together to distribuite all the received programs.

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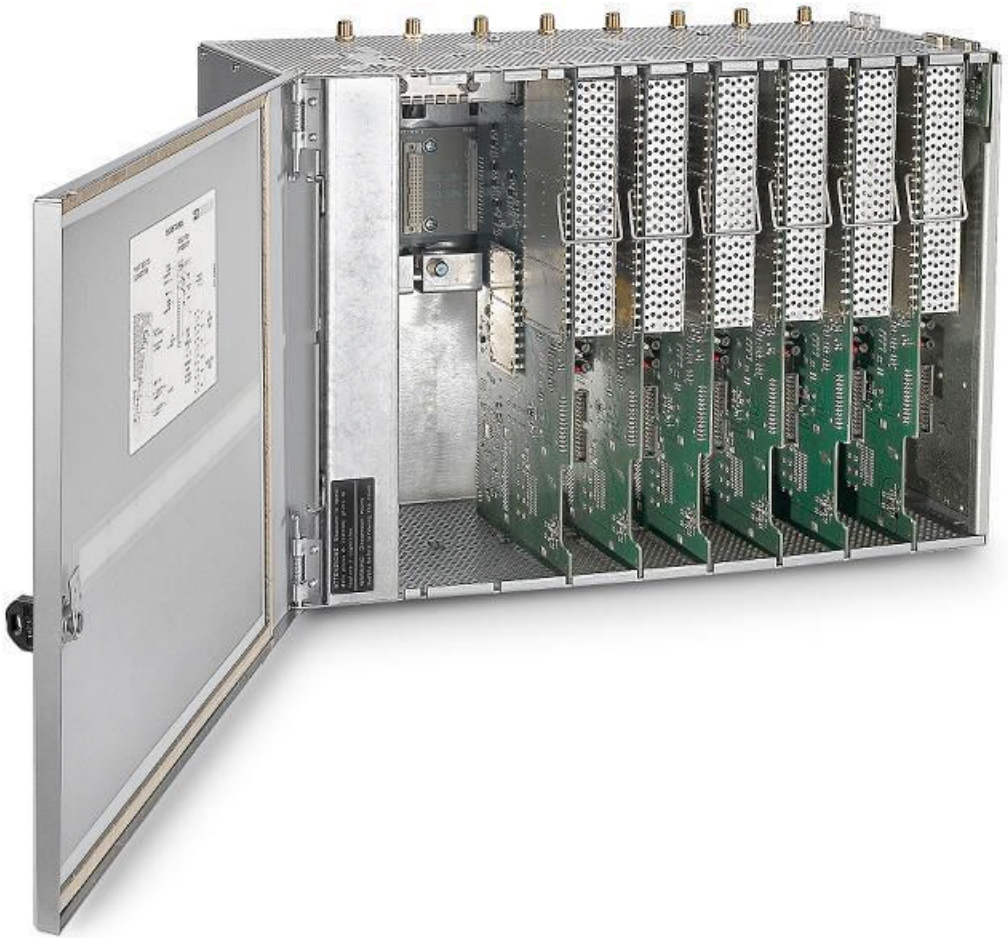

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283145	SIG9808CI	Single	1	430×305x200	12.000	13.000
283142	SIG9708CA	Single	1	430×305x200	11.000	11.000
283146	SIG9808MR	Single	1	300×200x100	0.722	0.722
283147	SIG9808LT	Single	1	48x50x20	0.058	0.058
283144	SIG9708PS	Single	1	300×200x100	1.600	1.675

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